

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. - 44. (Cancelled)

45. (Currently Amended) ~~The apparatus as defined in claim 44 wherein~~

An electric arc welding apparatus comprising:

a welding station;

a battery for providing a DC battery voltage; and

a high switching speed converter coupled to said battery for converting said DC battery voltage to a signal conditioned for welding, wherein said high switching speed converter includes a pulse width modulator that at least partially controls said signal conditioned for welding to a welding electrode and a waveform generator that at least partially controls said pulse width modulator, said high switching speed converter creating a series of current pulses that constitute a welding cycle representative of a current waveform, said pulse width modulator controlling a current pulse width of a plurality of said current pulses, wherein said welding station, said battery and said high switching speed converter are movable on a wheeled carriage, and said battery comprises a 48 volt battery pack and provides DC voltage to said high switching speed converter and to said wheeled carriage.

46. (Previously Presented) The apparatus as defined in claim 45 wherein said waveform generator drives said pulse width modulator at a frequency of 20 kHz.

47. (Currently Amended) The apparatus as defined in claim 46 wherein wherein said battery is supplied with recharging power by an on-board battery charger, said battery charger being operative to be plugged into an external AC power source via an extension cord.

48. – 49. (Canceled)

50. (Previously Presented) The apparatus as defined in claim 47 wherein said high switching speed converter comprises a DC down chopper and wherein a

freewheeling diode is connected in parallel with said welding electrode and behind a parallel choke of a switching stage of said high speed switching converter.

51. – 57. (Canceled)